

This Page Is Inserted by IFW Operations  
and is not a part of the Official Record

## **BEST AVAILABLE IMAGES**

Defective images within this document are accurate representations of the original documents submitted by the applicant.

Defects in the images may include (but are not limited to):

- BLACK BORDERS
- TEXT CUT OFF AT TOP, BOTTOM OR SIDES
- FADED TEXT
- ILLEGIBLE TEXT
- SKEWED/SLANTED IMAGES
- COLORED PHOTOS
- BLACK OR VERY BLACK AND WHITE DARK PHOTOS
- GRAY SCALE DOCUMENTS

**IMAGES ARE BEST AVAILABLE COPY.**

**As rescanning documents *will not* correct images,  
please do not report the images to the  
Image Problem Mailbox.**



PubMed	Nucleotide	Protein	Genome	Structure	PMC	Taxonomy	OMIM	Bo
Search	PubMed	▼ for					Go	Clear
		Limits	Preview/Index	History	Clipboard	Details		

Display	Abstract	▼	Show: 20	▼	Sort	▼	Send to	Text	▼
---------	----------	---	----------	---	------	---	---------	------	---

Entrez PubMed

☐ 1: Biochem Biophys Res Commun 2001 Nov  
2;288(3):597-602

[Related Articles, Links](#)

[Full-Text Article](#)

### The US11 gene product of herpes simplex virus has intercellular trafficking activity.

PubMed Services

Koshizuka T, Takakuwa H, Goshima F, Murata T, Nishiyama Y.

Laboratory of Virology, Research Institute for Disease Mechanism and Control, Nagoya University School of Medicine, 65 Tsumai-cho, Showa-ku, Nagoya, 466-8550, Japan. ynishiya@med.nagoya-u.ac.jp

Related Resources

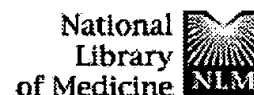
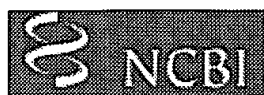
The US11 gene product of herpes simplex virus is an abundant virion structural protein with RNA-binding regulatory activity. Its carboxyl-terminal half consists of tandem tripeptide repeats of the sequence RXP. We demonstrate that the US11 protein has intercellular trafficking activity and accumulates in the nucleolus when singly expressed in cultured cells, and that the RXP repeats are responsible for this activity. These same properties were also observed in cells expressing a fusion protein linking US11 to the green fluorescent protein. Furthermore, exogenous US11 protein was internalized by cells at 4 degrees C, which suggests that US11 protein uptake occurs primarily through an energy-independent pathway. Copyright 2001 Academic Press.

PMID: 11676485 [PubMed - indexed for MEDLINE]

Display	Abstract	▼	Show: 20	▼	Sort	▼	Send to	Text	▼
---------	----------	---	----------	---	------	---	---------	------	---

[Write to the Help Desk](#)  
[NCBI](#) | [NLM](#) | [NIH](#)  
[Department of Health & Human Services](#)  
[Freedom of Information Act](#) | [Disclaimer](#)

Mar 17 2003 10:44:01



PubMed	Nucleotide	Protein	Genome	Structure	PMC	Taxonomy	OMIM	Bo
Search PubMed	▼ for						Go	Clear
Limits		Preview/Index		History		Clipboard		Details
Display	Abstract	▼	Show: 20	▼	Sort	▼	Send to	Text

☐ 1: Trends Biochem Sci 2001 Sep;26(9):545-50

[Related Articles, Links](#)

Entrez PubMed

## Kinesin carries the signal.

Verhey KJ, Rapoport TA.

PubMed Services

Dept of Cell Biology, Harvard Medical School, 240 Longwood Ave, Boston, MA 02115, USA. [kverhey@hms.harvard.edu](mailto:kverhey@hms.harvard.edu)

Related Resources

Conventional kinesin has long been known to be a molecular motor that transports vesicular cargo, but only recently have we begun to understand how it functions in cells. Regulation of kinesin involves self-inhibition in which a head-to-tail interaction prevents microtubule binding. Although the mechanism of motor activation remains to be clarified, recent progress with respect to cargo binding might provide a clue. Kinesin binds directly to the JIPs (JNK-interacting proteins), identified previously as scaffolding proteins in the JNK (c-Jun NH(2)-terminal kinase) signaling pathway. The JIPs can allow kinesin to transport many different cargoes and to concentrate and respond to signaling pathways at certain sites within the cell. The use of scaffolding proteins could be a general mechanism by which molecular motors link to their cargoes.

Publication Types:

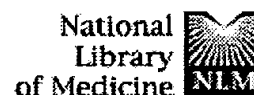
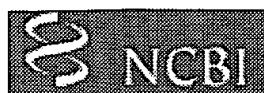
- Review
- Review, Tutorial

PMID: 11551791 [PubMed - indexed for MEDLINE]

Display	Abstract	▼	Show: 20	▼	Sort	▼	Send to	Text
---------	----------	---	----------	---	------	---	---------	------

[Write to the Help Desk](#)  
[NCBI](#) | [NLM](#) | [NIH](#)  
[Department of Health & Human Services](#)  
[Freedom of Information Act](#) | [Disclaimer](#)

Mar 17 2003 10:44:01



PubMed	Nucleotide	Protein	Genome	Structure	PMC	Taxonomy	OMIM	Bo
Search	PubMed	for					Go	Clear
		Limits	Preview/Index	History	Clipboard	Details		

Display	Summary	Show	20	Sort	Send to	Text
Items 1-20 of 283				Page	1	of 15 Next

## Entrez PubMed

- ☐ 1: [Diefenbach RJ, Miranda-Saksena M, Diefenbach E, Holland DJ, Boadle RA, Armati PJ, Cunningham AL.](#) [Related Articles, Links](#)

Herpes simplex virus tegument protein US11 interacts with conventional kinesin heavy chain.  
J Virol. 2002 Apr;76(7):3282-91.  
PMID: 11884553 [PubMed - indexed for MEDLINE]

## PubMed Services

- ☐ 2: [Holland DJ, Miranda-Saksena M, Boadle RA, Armati P, Cunningham AL.](#) [Related Articles, Links](#)

Anterograde transport of herpes simplex virus proteins in axons of peripheral human fetal neurons: an immunoelectron microscopy study.  
J Virol. 1999 Oct;73(10):8503-11.  
PMID: 10482603 [PubMed - indexed for MEDLINE]

- ☐ 3: [Miranda-Saksena M, Armati P, Boadle RA, Holland DJ, Cunningham AL.](#) [Related Articles, Links](#)

Anterograde transport of herpes simplex virus type 1 in cultured, dissociated human and rat dorsal root ganglion neurons.  
J Virol. 2000 Feb;74(4):1827-39.  
PMID: 10644356 [PubMed - indexed for MEDLINE]

## Related Resources

- ☐ 4: [Miranda-Saksena M, Boadle RA, Armati P, Cunningham AL.](#) [Related Articles, Links](#)

In rat dorsal root ganglion neurons, herpes simplex virus type 1 tegument forms in the cytoplasm of the cell body.  
J Virol. 2002 Oct;76(19):9934-51.  
PMID: 12208970 [PubMed - indexed for MEDLINE]

- ☐ 5: [Koshizuka T, Takakuwa H, Goshima F, Murata T, Nishiyama Y.](#) [Related Articles, Links](#)

The US11 gene product of herpes simplex virus has intercellular trafficking activity.  
Biochem Biophys Res Commun. 2001 Nov 2;288(3):597-602.  
PMID: 11676485 [PubMed - indexed for MEDLINE]

- ☐ 6: [Roller RJ, Roizman B.](#) [Related Articles, Links](#)

The herpes simplex virus Us11 open reading frame encodes a sequence-specific RNA-binding protein.  
J Virol. 1990 Jul;64(7):3463-70.  
PMID: 2161949 [PubMed - indexed for MEDLINE]

 **7:** [Attrill HL, Cumming SA, Clements JB, Graham SV.](#) [Related Articles, Links](#)



The herpes simplex virus type 1 US11 protein binds the coterminal UL12, UL13, and UL14 RNAs and regulates UL13 expression in vivo.

J Virol. 2002 Aug;76(16):8090-100.

PMID: 12134014 [PubMed - indexed for MEDLINE]

 **8:** [Roller RJ, Roizman B.](#) [Related Articles, Links](#)



Herpes simplex virus 1 RNA-binding protein US11 negatively regulates the accumulation of a truncated viral mRNA.

J Virol. 1991 Nov;65(11):5873-9.

PMID: 1656075 [PubMed - indexed for MEDLINE]


 **9:** [Diefenbach RJ, Diefenbach E, Douglas MW, Cunningham AL.](#) [Related Articles, Links](#)



The heavy chain of conventional kinesin interacts with the SNARE proteins SNAP25 and SNAP23.

Biochemistry. 2002 Dec 17;41(50):14906-15.

PMID: 12475239 [PubMed - indexed for MEDLINE]

 **10:** [Schaerer-Uthurralt N, Erard M, Kindbeiter K, Madjar JJ, Diaz JJ.](#) [Related Articles, Links](#)



Distinct domains in herpes simplex virus type 1 US11 protein mediate post-transcriptional transactivation of human T-lymphotropic virus type I envelope glycoprotein gene expression and specific binding to the Rex responsive element.

J Gen Virol. 1998 Jul;79 ( Pt 7):1593-602.

PMID: 9680120 [PubMed - indexed for MEDLINE]

 **11:** [Roller RJ, Roizman B.](#) [Related Articles, Links](#)



The herpes simplex virus 1 RNA binding protein US11 is a virion component and associates with ribosomal 60S subunits.

J Virol. 1992 Jun;66(6):3624-32.

PMID: 1316472 [PubMed - indexed for MEDLINE]

 **12:** [Peters GA, Khoo D, Mohr I, Sen GC.](#) [Related Articles, Links](#)



Inhibition of PACT-mediated activation of PKR by the herpes simplex virus type 1 Us11 protein.

J Virol. 2002 Nov;76(21):11054-64.

PMID: 12368348 [PubMed - indexed for MEDLINE]

 **13:** [Duc Dodon M, Mikaelian I, Sergeant A, Gazzolo L.](#) [Related Articles, Links](#)



The herpes simplex virus 1 Us11 protein cooperates with suboptimal amounts of human immunodeficiency virus type 1 (HIV-1) Rev protein to rescue HIV-1 production.

Virology. 2000 Apr 25;270(1):43-53.

PMID: 10772978 [PubMed - indexed for MEDLINE]

- ☐ **14:** [Diefenbach RJ, Mackay JP, Armati PJ, Cunningham AL.](#) [Related Articles, Links](#)



The C-terminal region of the stalk domain of ubiquitous human kinesin heavy chain contains the binding site for kinesin light chain.

Biochemistry. 1998 Nov 24;37(47):16663-70.  
PMID: 9843434 [PubMed - indexed for MEDLINE]

- ☐ **15:** [Simonin D, Diaz JJ, Kindbeiter K, Pernas P, Madjar JJ.](#) [Related Articles, Links](#)



Phosphorylation of herpes simplex virus type 1 Us11 protein is independent of viral genome expression.

Electrophoresis. 1995 Jul;16(7):1317-22.  
PMID: 7498183 [PubMed - indexed for MEDLINE]

- ☐ **16:** [Koelle DM, Schomogyi M, McClurkan C, Reymond SN, Chen HB.](#) [Related Articles, Links](#)



CD4 T-cell responses to herpes simplex virus type 2 major capsid protein VP5: comparison with responses to tegument and envelope glycoproteins.

J Virol. 2000 Dec;74(23):11422-5.  
PMID: 11070045 [PubMed - indexed for MEDLINE]

- ☐ **17:** [Martin A, O'Hare P, McLauchlan J, Elliott G.](#) [Related Articles, Links](#)



Herpes simplex virus tegument protein VP22 contains overlapping domains for cytoplasmic localization, microtubule interaction, and chromatin binding.

J Virol. 2002 May;76(10):4961-70.  
PMID: 11967313 [PubMed - indexed for MEDLINE]

- ☐ **18:** [Roller RJ, Monk LL, Stuart D, Roizman B.](#) [Related Articles, Links](#)



Structure and function in the herpes simplex virus 1 RNA-binding protein U(s)11: mapping of the domain required for ribosomal and nucleolar association and RNA binding in vitro.

J Virol. 1996 May;70(5):2842-51.  
PMID: 8627758 [PubMed - indexed for MEDLINE]

- ☐ **19:** [Bearer EL, Breakefield XO, Schuback D, Reese TS, LaVail JH.](#) [Related Articles, Links](#)



Retrograde axonal transport of herpes simplex virus: evidence for a single mechanism and a role for tegument.

Proc Natl Acad Sci U S A. 2000 Jul 5;97(14):8146-50.  
PMID: 10884436 [PubMed - indexed for MEDLINE]

- ☐ **20:** [Besse S, Diaz JJ, Pichard E, Kindbeiter K, Madjar JJ, Puvion-Dutilleul F.](#) [Related Articles, Links](#)



In situ hybridization and immuno-electron microscope analyses of the Us11 gene of herpes simplex virus type 1 during transient expression.

Chromosoma. 1996 Mar;104(6):434-44.  
PMID: 8601338 [PubMed - indexed for MEDLINE]

Display	Summary	Show	20	Sort	Send to	Text
Items 1-20 of 283				Page 1 of 15 Next		

[Write to the Help Desk](#)  
[NCBI](#) | [NLM](#) | [NIH](#)  
[Department of Health & Human Services](#)  
[Freedom of Information Act](#) | [Disclaimer](#)

Mar 17 2003 10:44:01

0

**WEST**[Generate Collection](#)[Print](#)**Search Results - Record(s) 1 through 10 of 12 returned.**☐ 1. Document ID: WO 200276216 A1 US 20020187163 A1

L34: Entry 1 of 12

File: DWPI

Oct 3, 2002

DERWENT-ACC-NO: 2003-058344

DERWENT-WEEK: 200305

COPYRIGHT 2003 DERWENT INFORMATION LTD

TITLE: New herpes simplex virus useful for treating or preventing cancer (e.g. breast, lung or colon cancer), infectious disease, or an autoimmune disease comprises a mutation within the BstEII-EcoNI fragment of the BamHI x fragment

INVENTOR: JOHNSON, P; MARTUZA, R L ; RABKIN, S D ; TODO, T ; MARTUZA, R

PRIORITY-DATA: 2001US-279069P (March 27, 2001), 2002US-0107036 (March 27, 2002)

## PATENT-FAMILY:

PUB-NO	PUB-DATE	LANGUAGE	PAGES	MAIN-IPC
WO 200276216 A1	October 3, 2002	E	037	A01N063/00
US 20020187163 A1	December 12, 2002		000	C12P021/06

INT-CL (IPC): A01 N 63/00; A61 K 39/12; A61 K 39/245; A61 K 39/255; A61 K 39/265; A61 K 39/27; C12 N 7/00; C12 N 7/04; C12 P 21/06

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	Claims	KWC
Drawn Desc	Image										

☐ 2. Document ID: WO 200105410 A1 EP 1202741 A1 AU 200059535 A

L34: Entry 2 of 12

File: DWPI

Jan 25, 2001

DERWENT-ACC-NO: 2001-159472

DERWENT-WEEK: 200238

COPYRIGHT 2003 DERWENT INFORMATION LTD

TITLE: Inhibiting transport of neurotropic viruses in cells, useful e.g. for preventing symptoms of reinfection, by blocking interaction between viral tegument protein and cellular motor protein

INVENTOR: ARMATI, P J; CUNNINGHAM, A L ; DIEFENBACH, E M ; DIEFENBACH, R J ; HOLLAND, D J ; MIRANDA-SAKSENA, M ; PENFOLD, M

PRIORITY-DATA: 1999AU-0001719 (July 20, 1999)

## PATENT-FAMILY:

PUB-NO	PUB-DATE	LANGUAGE	PAGES	MAIN-IPC
WO 200105410 A1	January 25, 2001	E	025	A61K035/30
EP 1202741 A1	May 8, 2002	E	000	A61K035/30
AU 200059535 A	February 5, 2001		000	A61K035/30

INT-CL (IPC): A61 K 35/30; A61 K 35/76; A61 K 38/17; A61 P 25/00; A61 P 25/02



Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	Claims	KWC
Draw Desc	Image										

---

☐ 3. Document ID: WO 9936562 A1 JP 2002508976 W AU 9921148 A EP 1045920 A1

L34: Entry 3 of 12

File: DWPI

Jul 22, 1999

DERWENT-ACC-NO: 1999-468988

DERWENT-WEEK: 200236

COPYRIGHT 2003 DERWENT INFORMATION LTD

TITLE: Expression system containing therapeutic gene and an immunosuppressor gene useful for treating an MHC-I autoimmune disease or killing tumor cells

INVENTOR: LINK, C J; RADOSEVICH, T J

PRIORITY-DATA: 1998US-071409P (January 14, 1998)

## PATENT-FAMILY:

PUB-NO	PUB-DATE	LANGUAGE	PAGES	MAIN-IPC
WO 9936562 A1	July 22, 1999	E	154	C12N015/86
JP 2002508976 W	March 26, 2002		158	C12N015/09
AU 9921148 A	August 2, 1999		000	
EP 1045920 A1	October 25, 2000	E	000	C12N015/86

INT-CL (IPC): A61 K 31/711; A61 K 35/76; A61 K 48/00; A61 P 37/06; C12 N 1/15; C12 N 1/19; C12 N 1/21; C12 N 5/10; C12 N 15/09; C12 N 15/34; C12 N 15/38; C12 N 15/86; C12 N 15/09; C12 R 1/93

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	KWC
Draw Desc	Image									

---

☐ 4. Document ID: US 5906935 A

L34: Entry 4 of 12

File: DWPI

May 25, 1999

DERWENT-ACC-NO: 1999-337238

DERWENT-WEEK: 199929

COPYRIGHT 2003 DERWENT INFORMATION LTD

TITLE: Cells transfected with Human Cytomegalovirus nucleic acids that encode proteins which down-regulate cell surface expression of major histocompatibility (class I) proteins

INVENTOR: CAMPBELL, A E; JONES, T R

PRIORITY-DATA: 1994US-0282696 (July 29, 1994), 1995US-0459587 (June 2, 1995), 1997US-0946598 (October 7, 1997)

## PATENT-FAMILY:

PUB-NO	PUB-DATE	LANGUAGE	PAGES	MAIN-IPC
US 5906935 A	May 25, 1999		027	C12N005/10

INT-CL (IPC): C12 N 1/00; C12 N 5/10; C12 N 15/79

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	KWC
Draw Desc	Image									

# WEST Search History

DATE: Friday, April 18, 2003

<u>Set Name</u>	<u>Query</u>	<u>Hit Count</u>	<u>Set Name</u>
side by side		result set	
<i>DB=USPT; PLUR=YES; OP=ADJ</i>		.	
L32	neurotropic virus and herpes.clm.	14	L32
L31	neurotropic virus and gpUS11	0	L31
L30	neurotropic virus and US11	0	L30
L29	neurotropic virus and herpes and US11	0	L29
L28	neurotropic virus and herpes	53	L28
L27	neurotropic virus	71	L27
L26	neurotropic virus and kinesin	0	L26
<i>DB=DWPI; PLUR=YES; OP=ADJ</i>			
L25	neurotropic virus and kinesin	1	L25
L24	neurotropic virus and US11	1	L24
L23	neurotropic virus	14	L23
L22	kinesin and herpes	1	L22
L21	kinesin	54	L21
L20	gpUS11	0	L20
<i>DB=USPT; PLUR=YES; OP=ADJ</i>			
L19	gpUS11.clm.	0	L19
L18	gpUS11	7	L18
L17	US11 gene product	28	L17
L16	US11 and tegument protein	4	L16
L15	US11 tegument protein	0	L15
<i>DB=DWPI; PLUR=YES; OP=ADJ</i>			
L14	herpes Simplex virus and US11	3	L14
L13	herpesvirus and US11	0	L13
L12	US11 adj herpesvirus	0	L12
<i>DB=USPT; PLUR=YES; OP=ADJ</i>			
L11	US11 adj herpesvirus	0	L11
L10	US11 adj antibody	0	L10
L9	US11 and antibody.clm.	4	L9
L8	US11 and herpesvirus.clm.	5	L8
L7	herpesvirus and kinesin.clm.	0	L7
L6	herpesvirus and kinesin	14	L6

L5	L1 and kinesin	0	L5
L4	L1 and herpesvirus and kinesin	0	L4
L3	L1 and herpesvirus	38	L3
L2	L1 and herpes virus	30	L2
L1	US11	66	L1

END OF SEARCH HISTORY

**WEST**

Generate Collection

Print

L18: Entry 1 of 7

File: USPT

Mar 7, 2000

DOCUMENT-IDENTIFIER: US 6033671 A

TITLE: Identification of human cytomegalovirus genes involved in down-regulation of MHC class I heavy chain expression

Detailed Description Text (4):

RNA and protein expression from US11 begins early and proceeds throughout the course of infection (Jones, T. R., and Muzithras, V. P. 1991. Fine mapping of transcripts expressed from the US6 gene family of human cytomegalovirus strain AD 1 69. J. Virol. 65:2024-2036). US11 encodes a glycoprotein of 32-kDa (gpUS11) which has N-linked sugar residues that are endoglycosidase H sensitive. Immunofluorescence experiments show that gpUS11 is not present on the cell surface, but is detected in the cytoplasm of HCMV-infected cells. Thus, gpUS11 is retained in the endoplasmic reticulum or cis golgi. The characteristics of HCMV gpUS11 are similar to the 25-kDa glycoprotein (E3-19K) encoded from the E3 region of adenovirus type 2. Ad E3-1 9K is nonessential for viral replication. It has been shown to contain endoglycosidase H-sensitive N-linked sugar residues, be retained in the endoplasmic reticulum, and bind MHC class I heavy chains, thereby preventing their transport to the cell surface 9 (Anderson, M., S. Paabo, T. Nilsson, and P. A. Peterson. 1985. Impaired intracellular transport of class I MHC antigens as a possible means for adenoviruses to evade immune surveillance. Cell 43:215-222; Burgert, H. G., and S. Kvist. 1985. An adenovirus type 2 glycoprotein blocks cell surface expression of human histocompatibility class I antigens. Cell 41:987-997). In contrast to Ad E3-19K, a direct association between gpUS11 and class I heavy chains (i.e., by coimmunoprecipitation) was not detected.

**WEST****End of Result Set**

Generate Collection

Print

L22: Entry 1 of 1

File: DWPI

Jan 25, 2001

DERWENT-ACC-NO: 2001-159472

DERWENT-WEEK: 200238

COPYRIGHT 2003 DERWENT INFORMATION LTD

TITLE: Inhibiting transport of neurotropic viruses in cells, useful e.g. for preventing symptoms of reinfection, by blocking interaction between viral tegument protein and cellular motor protein

INVENTOR: ARMATI, P J; CUNNINGHAM, A L ; DIEFENBACH, E M ; DIEFENBACH, R J ; HOLLAND, D J ; MIRANDA-SAKSENA, M ; PENFOLD, M

PRIORITY-DATA: 1999AU-0001719 (July 20, 1999)

## PATENT-FAMILY:

PUB-NO	PUB-DATE	LANGUAGE	PAGES	MAIN-IPC
WO 200105410 A1	January 25, 2001	E	025	A61K035/30
EP 1202741 A1	May 8, 2002	E	000	A61K035/30
AU 200059535 A	February 5, 2001		000	A61K035/30

INT-CL (IPC): A61 K 35/30; A61 K 35/76; A61 K 38/17; A61 P 25/00; A61 P 25/02

ABSTRACTED-PUB-NO: WO 200105410A

## BASIC-ABSTRACT:

NOVELTY - Preventing or reducing transport of a neurotropic virus (NV) within a neuron or cell by altering, or preventing, interaction between a structural tegument protein (I) of NV and a motor protein (II) of the cell, is new.

DETAILED DESCRIPTION - An INDEPENDENT CLAIM is also included for an antiviral composition containing a compound (III) able to alter or prevent interaction between (I) and (II).

ACTIVITY - Antiviral.

No biological data is given.

MECHANISM OF ACTION - Provision of decoy molecules that bind to (I) or (II), preventing the normal interaction between virus and cell. The method is based on the observation that interaction between the tegument protein US11 of herpes simplex and the ubiquitous kinesin heavy chain is the mechanism of anterograde transport of virus in rat axons.

USE - The method is used to prevent transport of varicella zoster, rabies virus and particularly herpes simplex, i.e. to prevent clinical symptoms of reinfection and/or development of a latent state of the virus in ganglia.

ABSTRACTED-PUB-NO: WO 200105410A

## EQUIVALENT-ABSTRACTS:

CHOSEN-DRAWING: Dwg.0/5

☐ 5. Document ID: US 5846806 A

L34: Entry 5 of 12

File: DWPI

Dec 8, 1998

DERWENT-ACC-NO: 1999-059070

DERWENT-WEEK: 199929

COPYRIGHT 2003 DERWENT INFORMATION LTD

TITLE: Human cytomegalovirus deletion mutants - useful for vaccine production

INVENTOR: CAMPBELL, A E; JONES, T R

PRIORITY-DATA: 1994US-0282696 (July 29, 1994)

PATENT-FAMILY:

PUB-NO	PUB-DATE	LANGUAGE	PAGES	MAIN-IPC
US 5846806 A	December 8, 1998		055	C12N007/04

INT-CL (IPC): C12 N 7/04

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	KWIC
Drawn Desc	Clip Img	Image								

☐ 6. Document ID: EP 799893 A1 ES 2164309 T3 WO 9738118 A1 FR 2747046 A1 AU 9723942 A JP 2000508893 W US 6140114 A EP 799893 B1 DE 69706593 E

L34: Entry 6 of 12

File: DWPI

Oct 8, 1997

DERWENT-ACC-NO: 1997-482675

DERWENT-WEEK: 200222

COPYRIGHT 2003 DERWENT INFORMATION LTD

TITLE: Vaccine against viral infection - comprising vector or vectors expressing constituents of defective viral particles

INVENTOR: KLATZMANN, D; SALZMANN, J ; SALZMANN, J L

PRIORITY-DATA: 1996FR-0004370 (April 5, 1996), 1998US-0166147 (October 5, 1998)

PATENT-FAMILY:

PUB-NO	PUB-DATE	LANGUAGE	PAGES	MAIN-IPC
EP 799893 A1	October 8, 1997	F	018	C12N015/86
ES 2164309 T3	February 16, 2002		000	C12N015/86
WO 9738118 A1	October 16, 1997	F	043	
FR 2747046 A1	October 10, 1997		023	A61K039/12
AU 9723942 A	October 29, 1997		000	
JP 2000508893 W	July 18, 2000		033	C12N015/09
US 6140114 A	October 31, 2000		000	C12N015/00
EP 799893 B1	September 12, 2001	F	000	C12N015/86
DE 69706593 E	October 18, 2001		000	C12N015/86

INT-CL (IPC): A61 K 31/7088; A61 K 35/76; A61 K 38/00; A61 K 39/12; A61 K 39/21; A61 K 48/00; A61 P 31/12; A61 P 31/18; A61 P 37/00; C07 K 14/16; C12 N 5/10; C12 N 7/00; C12 N 7/01; C12 N 7/04; C12 N 15/00; C12 N 15/09; C12 N 15/79; C12 N 15/86

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments
Draw Desc	Clip Img	Image							

KWC

☐ 7. Document ID: WO 9732605 A1

L34: Entry 7 of 12

File: DWPI

Sep 12, 1997

DERWENT-ACC-NO: 1997-457320

DERWENT-WEEK: 199742

COPYRIGHT 2003 DERWENT INFORMATION LTD

TITLE: Recombinant cytomegalovirus nucleic acid encoding US11 or 2 protein - lacking MHC class I binding domain but having binding domain for another protein, used to degrade this protein in a mammalian cell's cytosol

INVENTOR: PLOEGH, H L; WIERTZ, E J H J

PRIORITY-DATA: 1996US-013023P (March 8, 1996)

## PATENT-FAMILY:

PUB-NO	PUB-DATE	LANGUAGE	PAGES	MAIN-IPC
WO 9732605 A1	September 12, 1997	E	034	A61K047/30

INT-CL (IPC): A61 K 47/30; C07 K 14/045; C12 N 15/38; C12 N 15/62; C12 N 15/85; C12 N 15/86; C12 N 15/87

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments
Draw Desc	Clip Img	Image							

KWC

☐ 8. Document ID: JP 09218845 A

L34: Entry 8 of 12

File: DWPI

Aug 19, 1997

DERWENT-ACC-NO: 1997-467872

DERWENT-WEEK: 199743

COPYRIGHT 2003 DERWENT INFORMATION LTD

TITLE: Selection system of external connection equipment e.g. mechanical interface circuit - inputs several selecting signals to their respective input elements to select mechanical interface circuits connected to numerical control apparatus

PRIORITY-DATA: 1996JP-0045590 (February 8, 1996)

## PATENT-FAMILY:

PUB-NO	PUB-DATE	LANGUAGE	PAGES	MAIN-IPC
JP 09218845 A	August 19, 1997		013	G06F013/14

INT-CL (IPC): G05 B 19/414; G06 F 13/14

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments
Draw Desc	Clip Img	Image							

KWC

☐ 9. Document ID: WO 9604383 A1 AU 733195 B AU 9531535 A FI 9700351 A NO 9700369 A EP 775209 A1 US 5720957 A JP 10503378 W US 5753476 A KR 97704883 A MX 9700710 A1 NZ 290718 A AU 709552 B AU 9944522 A CA 2328638 A1

L34: Entry 9 of 12

File: DWPI

Feb 15, 1996

DERWENT-ACC-NO: 1996-129399

DERWENT-WEEK: 200130

COPYRIGHT 2003 DERWENT INFORMATION LTD

TITLE: Identification of a human cytomegalovirus gene region - and use of the gene in regulation of major histocompatibility complex class I expression and in the prevention of or redn. of susceptibility to human cytomegalovirus infections

INVENTOR: CAMPBELL, A E; JONES, T R

PRIORITY-DATA: 1994US-0282696 (July 29, 1994), 1995US-0459586 (June 2, 1995), 1995US-0458544 (June 2, 1995)

## PATENT-FAMILY:

PUB-NO	PUB-DATE	LANGUAGE	PAGES	MAIN-IPC
WO 9604383 A1	February 15, 1996	E	063	C12N015/38
AU 733195 B	May 10, 2001		000	C12N007/04
AU 9531535 A	March 4, 1996		000	C12N015/38
FI 9700351 A	January 28, 1997		000	C12N000/00
NO 9700369 A	March 21, 1997		000	C12N015/38
EP 775209 A1	May 28, 1997	E	000	C12N015/38
US 5720957 A	February 24, 1998		054	A61K039/245
JP 10503378 W	March 31, 1998		068	C12N015/01
US 5753476 A	May 19, 1998		000	C12N015/64
KR 97704883 A	September 6, 1997		000	C12N015/38
MX 9700710 A1	September 1, 1997		000	C12N015/38
NZ 290718 A	March 29, 1999		000	C12N015/38
AU 709552 B	September 2, 1999		000	C12N015/38
AU 9944522 A	November 4, 1999		000	C12N007/04
CA 2328638 A1	February 15, 1996	E	000	C12N007/01

INT-CL (IPC): A61 K 31/70; A61 K 39/245; A61 K 48/00; C07 K 14/045; C12 N 0/00; C12 N 7/00; C12 N 7/01; C12 N 7/04; C12 N 15/01; C12 N 15/10; C12 N 15/34; C12 N 15/38; C12 N 15/64; C12 N 15/86; C12 N 15/861

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	KWIC
Draw Desc	Clip Img	Image								

☐ 10. Document ID: EP 684163 A2 ES 2101593 T3 DE 4418293 A1 JP 07329703 A EP 684163 A3 US 5608269 A EP 684163 B1 DE 59500169 G

L34: Entry 10 of 12

File: DWPI

Nov 29, 1995

DERWENT-ACC-NO: 1996-000925

DERWENT-WEEK: 199736

COPYRIGHT 2003 DERWENT INFORMATION LTD

TITLE: Automobile passenger restraint activation system - has 2 power transistors in release end stage controlled by overlapping control signals with current flow indicated by respective current detectors

INVENTOR: FENDT, G; HORA, P ; SPIES, H

PRIORITY-DATA: 1994DE-4418293 (May 26, 1994)

PATENT-FAMILY:



PUB-NO	PUB-DATE	LANGUAGE	PAGES	MAIN-IPC
EP 684163 A2	November 29, 1995	G	006	B60R021/00
ES 2101593 T3	July 1, 1997		000	B60R021/00
DE 4418293 A1	November 30, 1995		005	B60R016/02
JP 07329703 A	December 19, 1995		005	B60R021/32
EP 684163 A3	December 20, 1995		000	B60R021/00
US 5608269 A	March 4, 1997		005	B60R021/32
EP 684163 B1	April 9, 1997	G	007	B60R021/00
DE 59500169 G	May 15, 1997		000	B60R021/00

INT-CL (IPC): B60 R 16/02; B60 R 21/00; B60 R 21/02; B60 R 21/32; B60 R 22/46; H03 K 17/082

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	KWIC
Draw Desc	Clip Img	Image								

[Generate Collection](#)[Print](#)

Terms	Documents
US11	12

**Display Format:**[CIT](#)[Change Format](#)[Previous Page](#)[Next Page](#)

**WEST****End of Result Set**

Generate Collection

Print

L17: Entry 28 of 28

File: USPT

Aug 2, 1994

US-PAT-NO: 5334498

DOCUMENT-IDENTIFIER: US 5334498 A

**\*\* See image for Certificate of Correction \*\***

TITLE: Herpes simplex virus 1 UL13 gene product: methods and compositions

DATE-ISSUED: August 2, 1994

## INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Roizman; Bernard	Chicago	IL		
Purves; Frances C.	Chicago	IL		

US-CL-CURRENT: 435/5, 435/183, 435/188, 435/194

## CLAIMS:

What is claimed is:

1. A process of identifying a substance for its potential ability to impair herpes simplex vital replication comprising the steps of:

a) forming an admixture of an effective catalytic amount of herpes simplex virus U.sub.L 13 gene product, and an effective amount of a substrate whose phosphorylation is catalyzed by said gene product in a liquid medium containing a phosphate donor;

b) selecting a substance suspected of impairing herpes simplex viral replication; and

c) testing for the ability of said substance to inhibit phosphorylation of said substrate and thus potentially to impair herpes simplex viral replication.

2. The process according to claim 1 wherein said substrate is infected cell protein 0, infected cell protein 22, herpes simplex virus US11 gene product, herpes simplex virus UL26 gene product, herpes simplex virus UL26.5 gene product or herpes simplex virus UL47 gene product.

=> d 112 1-2 all

L12 ANSWER 1 OF 2 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC.

AN 1992:333236 BIOSIS

DN BA94:35077

TI THE HERPES SIMPLEX VIRUS 1 RNA BINDING PROTEIN U-S11 IS A VIRION COMPONENT AND ASSOCIATES WITH RIBOSOMAL 60S SUBUNITS.

AU **ROLLER R J**; ROIZMAN B

CS MARJORIE B. KOVLER VIRAL ONCOLOGY LABORATORIES, UNIVERSITY CHICAGO, CHICAGO, ILL. 60637.

SO J VIROL, (1992) 66 (6), 3624-3632.

CODEN: JOVIAM. ISSN: 0022-538X.

FS BA; OLD

LA English

AB The herpes simplex virus 1 **Us11** gene encodes a site- and conformation-specific RNA binding regulatory protein. We fused the coding sequence of this protein with that of .beta.-galactosidase, expressed the chimeric gene in Escherichia coli, and purified a fusion protein which binds RNA in the same way as the infected cell protein. The fusion protein was used to generate anti-**Us11** monoclonal antibody. Studies with this antibody showed that **Us11** protein is a viral structural protein estimated to be present in 600 to 1,000 copies per virion. The great majority of cytoplasmic **Us11** protein was found in association with the 60S subunit of infected cell ribosomes. **Us11** protein associates with ribosomes both late in infection at the time of its synthesis and at the time of infection after its introduction into the cytoplasm by the virion. **Us11** protein expressed in an uninfected cell line stably transfected with the **Us11** gene associates with ribosomal 60S subunits and localizes to nucleoli, suggesting that **Us11** protein requires no other viral functions for these associations.

CC Cytology and Cytochemistry - Animal \*02506

Biochemical Studies - Nucleic Acids, Purines and Pyrimidines 10062

Biochemical Studies - Proteins, Peptides and Amino Acids \*10064

Virology - Animal Host Viruses \*33506

Immunology and Immunochemistry - General; Methods 34502

BC Herpetoviridae and/or Herpesviridae 02220

Vertebrata - Unspecified 85150

IT Miscellaneous Descriptors

IMMUNOLocalization

L12 ANSWER 2 OF 2 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC.

AN 1990:353755 BIOSIS

DN BA90:50334

TI THE HERPES SIMPLEX VIRUS U-S11 OPEN READING FRAME ENCODES A SEQUENCE-SPECIFIC RNA BINDING PROTEIN.

AU **ROLLER R J**; ROIZMAN B

CS MARJORIE B. KOVLER VIRAL ONCOL. LAB., UNIV. CHICAGO, CHICAGO, ILL. 60637.

SO J VIROL, (1990) 64 (7), 3463-3470.

CODEN: JOVIAM. ISSN: 0022-538X.

FS BA; OLD

LA English

AB Herpes simplex virus 1- and 2 (HSV-1 and HSV-2)-infected cell extracts but not uninfected cell extracts contain an RNA-binding activity for an in vitro-transcribed sequence from the domains of the HSV-1 **US11** and .alpha.47 genes. The transcript of this sequence has not been detected in infected cells. The binding is sequence and secondary structure specific and protects approximately 95 nucleotides from RNase digestion. Analyses of HSV-1 .times. HSV-2 recombinants and HSV-1 deletion mutants mapped the function necessary for activity to the **US11** or .alpha.47 open reading frame. The .alpha.47 gene was excluded, since the

RNA-binding activity is a late (.gamma.2) function dependent on viral DNA synthesis for its expression. The **US11** function is the only viral function required, since translation in rabbit reticulocyte lysate of an in vitro-synthesized **US11** mRNA resulted in the appearance of the RNA-binding activity. The product of the **US11** open reading frame is associated with the RNA probe-protein complex inasmuch as insertion of a sequence encoding in frame 15 additional amino acids at the C terminus of the **US11** protein caused a corresponding decrease in the electrophoretic mobility of the binding complex.

CC Biochemical Studies - Nucleic Acids, Purines and Pyrimidines \*10062  
Biochemical Studies - Proteins, Peptides and Amino Acids \*10064  
Replication, Transcription, Translation 10300  
Biophysics - Molecular Properties and Macromolecules \*10506  
Metabolism - Proteins, Peptides and Amino Acids 13012  
Metabolism - Nucleic Acids, Purines and Pyrimidines 13014  
Genetics of Bacteria and Viruses \*31500  
In Vitro Studies, Cellular and Subcellular 32600  
Virology - Animal Host Viruses \*33506  
BC Herpetoviridae and/or Herpesviridae 02220  
IT Miscellaneous Descriptors  
TYPE 1 TYPE 2 LATE GENE FUNCTION

d his

(FILE 'HOME' ENTERED AT 13:25:27 ON 18 APR 2003)

INDEX 'ADISCTI, ADISINSIGHT, ADISNEWS, AGRICOLA, ANABSTR, AQUASCI,  
BIOBUSINESS, BIOCOMMERCE, BIOSIS, BIOTECHABS, BIOTECHDS, BIOTECHNO, CABA,  
CANCERLIT, CAPLUS, CEABA-VTB, CEN, CIN, CONFSCI, CROPB, CROPU, DDFB,  
DDFU, DGENE, DRUGB, DRUGLAUNCH, DRUGMONOG2, ...' ENTERED AT 13:25:40 ON  
18 APR 2003

SEA KINESIN AND US11

-----  
1 FILE BIOSIS  
1 FILE BIOTECHNO  
1 FILE CAPLUS  
1 FILE EMBASE  
1 FILE ESBIODBASE  
1 FILE LIFESCI  
1 FILE MEDLINE  
1 FILE SCISEARCH  
1 FILE WPIDS  
1 FILE WPINDEX

L1

QUE KINESIN AND US11

-----  
SEA US11 AND HERPES

-----  
3 FILE ADISCTI  
2 FILE ADISINSIGHT  
1 FILE AGRICOLA  
1 FILE ANABSTR  
58 FILE BIOSIS  
12 FILE BIOTECHABS  
12 FILE BIOTECHDS  
36 FILE BIOTECHNO  
30 FILE CANCERLIT  
78 FILE CAPLUS  
2 FILE EMBAL  
40 FILE EMBASE  
22 FILE ESBIODBASE  
4 FILE FEDRIP  
3 FILE GENBANK  
7 FILE IFIPAT  
1 FILE JICST-EPLUS  
39 FILE LIFESCI  
61 FILE MEDLINE  
10 FILE PASCAL  
46 FILE SCISEARCH  
20 FILE TOXCENTER  
61 FILE USPATFULL  
2 FILE USPAT2  
9 FILE WPIDS  
9 FILE WPINDEX

L2

QUE US11 AND HERPES

-----

FILE 'MEDLINE' ENTERED AT 13:27:11 ON 18 APR 2003

L3 61 S US11 AND HERPES  
L4 5 S ANTIBODY AND L3  
L5 1 S KINESIN AND US11  
L6 1773 S KINESIN  
L7 211 S L6 AND ANTIBODY  
L8 21 S L7 AND INHIBITI?  
E ROLLER R J/AU

L9 24 S E3  
L10 1 S E6  
L11 5 S US11 AND L9

L12 FILE 'BIOSIS' ENTERED AT 13:33:38 ON 18 APR 2003  
2 S L11

L13 FILE 'EMBASE' ENTERED AT 13:35:04 ON 18 APR 2003  
0 S L11

L14 FILE 'SCISEARCH' ENTERED AT 13:35:24 ON 18 APR 2003  
5 S L11

FILE 'MEDLINE' ENTERED AT 13:35:52 ON 18 APR 2003

=>

d 114 1-5

L14 ANSWER 1 OF 5 SCISEARCH COPYRIGHT 2003 ISI (R)  
AN 96:314288 SCISEARCH  
GA The Genuine Article (R) Number: UF247  
TI STRUCTURE AND FUNCTION IN THE HERPES-SIMPLEX-VIRUS-1 RNA-BINDING PROTEIN  
U(S)11 - MAPPING OF THE DOMAIN REQUIRED FOR RIBOSOMAL AND NUCLEOLAR  
ASSOCIATION AND RNA-BINDING IN-VITRO  
AU **ROLLER R J**; MONK L L; STUART D; ROIZMAN B (Reprint)  
CS UNIV CHICAGO, MARJORIE B KOVLER VIRAL ONCOL LABS, 910 E 58TH ST, CHICAGO,  
IL, 60637 (Reprint); UNIV CHICAGO, MARJORIE B KOVLER VIRAL ONCOL LABS,  
CHICAGO, IL, 60637; UNIV IOWA, DEPT MICROBIOL, IOWA CITY, IA, 52242  
CYA USA  
SO JOURNAL OF VIROLOGY, (MAY 1996) Vol. 70, No. 5, pp. 2842-2851.  
ISSN: 0022-538X.  
DT Article; Journal  
FS LIFE  
LA ENGLISH  
REC Reference Count: 35  
\*ABSTRACT IS AVAILABLE IN THE ALL AND IALL FORMATS\*

L14 ANSWER 2 OF 5 SCISEARCH COPYRIGHT 2003 ISI (R)  
AN 94:239828 SCISEARCH  
GA The Genuine Article (R) Number: NF452  
TI A HERPES-SIMPLEX VIRUS-1 U(S)11-EXPRESSING CELL-LINE IS RESISTANT TO  
HERPES-SIMPLEX VIRUS-INFECTION AT A STEP IN VIRAL ENTRY MEDIATED BY  
GLYCOPROTEIN-D  
AU **ROLLER R J**; ROIZMAN B (Reprint)  
CS UNIV CHICAGO, MARJORIE B KOVLER VIRAL ONCOL LABS, 910 E 58TH ST, CHICAGO,  
IL, 60637 (Reprint); UNIV CHICAGO, MARJORIE B KOVLER VIRAL ONCOL LABS,  
CHICAGO, IL, 60637  
CYA USA  
SO JOURNAL OF VIROLOGY, (MAY 1994) Vol. 68, No. 5, pp. 2830-2839.  
ISSN: 0022-538X.  
DT Article; Journal  
FS LIFE  
LA ENGLISH  
REC Reference Count: 37  
\*ABSTRACT IS AVAILABLE IN THE ALL AND IALL FORMATS\*

L14 ANSWER 3 OF 5 SCISEARCH COPYRIGHT 2003 ISI (R)  
AN 92:322617 SCISEARCH  
GA The Genuine Article (R) Number: HU599  
TI THE HERPES-SIMPLEX VIRUS-1 RNA-BINDING PROTEIN U(S)11 IS A VIRION  
COMPONENT AND ASSOCIATES WITH RIBOSOMAL 60S SUBUNITS  
AU **ROLLER R J**; ROIZMAN B (Reprint)  
CS UNIV CHICAGO, MARJORIE B KOVLER VIRAL ONCOL LABS, CHICAGO, IL, 60637  
CYA USA  
SO JOURNAL OF VIROLOGY, (JUN 1992) Vol. 66, No. 6, pp. 3624-3632.  
ISSN: 0022-538X.  
DT Article; Journal  
FS LIFE  
LA ENGLISH  
REC Reference Count: 40  
\*ABSTRACT IS AVAILABLE IN THE ALL AND IALL FORMATS\*

L14 ANSWER 4 OF 5 SCISEARCH COPYRIGHT 2003 ISI (R)  
AN 91:591150 SCISEARCH  
GA The Genuine Article (R) Number: GL296  
TI HERPES-SIMPLEX VIRUS-1 RNA-BINDING PROTEIN-**Us11** NEGATIVELY  
REGULATES THE ACCUMULATION OF A TRUNCATED VIRAL MESSENGER-RNA  
AU **ROLLER R J**; ROIZMAN B (Reprint)

CS UNIV CHICAGO, MARJORIE B KOVLER VIRAL ONCOL LABS, CHICAGO, IL, 60637  
CYA USA  
SO JOURNAL OF VIROLOGY, (1991) Vol. 65, No. 11, pp. 5873-5879.  
DT Article; Journal  
FS LIFE  
LA ENGLISH  
REC Reference Count: 34  
\*ABSTRACT IS AVAILABLE IN THE ALL AND IALL FORMATS\*

L14 ANSWER 5 OF 5 SCISEARCH COPYRIGHT 2003 ISI (R)  
AN 90:338959 SCISEARCH  
GA The Genuine Article (R) Number: DJ203  
TI THE HERPES-SIMPLEX VIRUS **US11** OPEN READING FRAME ENCODES A  
SEQUENCE-SPECIFIC RNA-BINDING PROTEIN  
AU **ROLLER R J**; ROIZMAN B (Reprint)  
CS UNIV CHICAGO, MARJORIE B KOVLER VIRAL ONCOL LABS, CHICAGO, IL, 60637  
CYA USA  
SO JOURNAL OF VIROLOGY, (1990) Vol. 64, No. 7, pp. 3463-3470.  
DT Article; Journal  
FS LIFE  
LA ENGLISH  
REC Reference Count: 43

=> d l14 1-5 all

L14 ANSWER 1 OF 5 SCISEARCH COPYRIGHT 2003 ISI (R)  
AN 96:314288 SCISEARCH  
GA The Genuine Article (R) Number: UF247  
TI STRUCTURE AND FUNCTION IN THE HERPES-SIMPLEX-VIRUS-1 RNA-BINDING PROTEIN  
U(S)11 - MAPPING OF THE DOMAIN REQUIRED FOR RIBOSOMAL AND NUCLEOLAR  
ASSOCIATION AND RNA-BINDING IN-VITRO  
AU **ROLLER R J**; MONK L L; STUART D; ROIZMAN B (Reprint)  
CS UNIV CHICAGO, MARJORIE B KOVLER VIRAL ONCOL LABS, 910 E 58TH ST, CHICAGO,  
IL, 60637 (Reprint); UNIV CHICAGO, MARJORIE B KOVLER VIRAL ONCOL LABS,  
CHICAGO, IL, 60637; UNIV IOWA, DEPT MICROBIOL, IOWA CITY, IA, 52242  
CYA USA  
SO JOURNAL OF VIROLOGY, (MAY 1996) Vol. 70, No. 5, pp. 2842-2851.  
ISSN: 0022-538X.  
DT Article; Journal  
FS LIFE  
LA ENGLISH  
REC Reference Count: 35  
AB The herpes simplex virus 1 U(S)11 protein is an RNA-binding regulatory  
protein that specifically and stably associates with 60S ribosomal  
subunits and nucleoli and is incorporated into virions, We report that  
U(S)11/beta-galactosidase fusion protein expressed in bacteria bound to  
rRNA from the 60S subunit and not the 30S subunit, This binding reflects  
the specificity of ribosomal subunit association, Analyses of deletion  
mutants of the U(S)11 gene showed that specific RNA binding activity,  
nucleolar localization, and association with 60S ribosomal subunits were  
found to map to the amino acid sequences of the carboxyl terminus of  
U(S)11 protein, suggesting that these activities all reflect specific  
binding of U(S)11 to large subunit rRNA. The carboxyl-terminal half of the  
protein consists of a regular tripeptide repeat of the sequence RXP and  
constitutes a completely novel RNA-binding domain. All of the mutant  
U(S)11 proteins could be incorporated into virus particles, suggesting  
that the signal for virion incorporation either is at the amino-terminal  
four amino acids or is redundant in the protein.  
CC VIROLOGY  
STP KeyWords Plus (R): VIRAL MESSENGER-RNA; REGULATORY PROTEIN; TYPE-1; GENE;  
SEQUENCE; **US11**; POLYPEPTIDE; SUBUNITS; DELETION; PRODUCT



RE

Referenced Author (RAU)	Year (RPY)	VOL (RVL)	PG (RPG)	Referenced Work (RWK)
ADZHUBEI A A	1993	229	472	J MOL BIOL
BLUNDELL T L	1981	78	4175	P NATL ACAD SCI USA
BURD C G	1994	265	615	SCIENCE
CHALFIE M	1994	263	802	SCIENCE
DARBON H	1992	209	765	EUR J BIOCHEM
DIAZ J J	1993	74	397	J GEN VIROL
EJERCITO P M	1968	2	357	J GEN VIROL
FENWICK M L	1984		359	COMPREHENSIVE VIROLO
HARDWICKE M A	1994	68	4797	J VIROL
JOHNSON P A	1986	67	871	J GEN VIROL
KRISTIE T M	1986	83	3218	P NATL ACAD SCI USA
KWONG A D	1989	63	4834	J VIROL
LONSDALE D M	1979	43	151	J GEN VIROL
MACLEAN C A	1987	68	1929	J GEN VIROL
MATTAJ I W	1994	73	837	CELL
MAVROMARANAZOS P	1986	60	807	J VIROL
MCLAUCHLAN J	1992	66	6939	J VIROL
MEIGNIER B	1988	162	251	VIROLOGY
NISHIYAMA Y	1993	194	419	VIROLOGY
PELLETT P E	1985	53	243	J VIROL
POST L E	1981	25	227	CELL
PRASHER D C	1992	111	229	GENE
PUVIONDUTILLEUL F	1987	43	487	EUR J CELL BIOL
RIXON F J	1984	12	2473	NUCLEIC ACIDS RES
ROIZMAN B	1968	2	83	J VIROL
ROLLER R J	1990	64	3463	J VIROL
ROLLER R J	1991	65	5873	J VIROL
ROLLER R J	1992	66	3624	J VIROL
ROLLER R J				UNPUB
SANDRIGOLDIN R M	1992	6	848	GENE DEV
SIMONIN D	1995	16	1317	ELECTROPHORESIS
SPEAR P G	1972	9	143	J VIROL
SREERAMA N	1994	33	10022	BIOCHEMISTRY-US
WATSON R J	1982	10	979	NUCLEIC ACIDS RES
WILLIAMSON M P	1994	297	249	BIOCHEM J

L14 ANSWER 2 OF 5 SCISEARCH COPYRIGHT 2003 ISI (R)

AN 94:239828 SCISEARCH

GA The Genuine Article (R) Number: NF452

TI A HERPES-SIMPLEX VIRUS-1 U(S)11-EXPRESSING CELL-LINE IS RESISTANT TO  
HERPES-SIMPLEX VIRUS-INFECTION AT A STEP IN VIRAL ENTRY MEDIATED BY  
GLYCOPROTEIN-D

AU **ROLLER R J**; ROIZMAN B (Reprint)

CS UNIV CHICAGO, MARJORIE B KOVLER VIRAL ONCOL LABS, 910 E 58TH ST, CHICAGO,  
IL, 60637 (Reprint); UNIV CHICAGO, MARJORIE B KOVLER VIRAL ONCOL LABS,  
CHICAGO, IL, 60637

CYA USA

SO JOURNAL OF VIROLOGY, (MAY 1994) Vol. 68, No. 5, pp. 2830-2839.  
ISSN: 0022-538X.

DT Article; Journal

FS LIFE

LA ENGLISH

REC Reference Count: 37

AB A baby hamster kidney .cents.BHK(tk(-))| cell line (U(s)11c119) which  
stably expresses the U(s)11 and alpha 4 genes of herpes simplex virus 1  
strain F .cents.HSV-1(F)| was found to be resistant to infection with  
HSV-1, Although wild-type HSV-1(F) attached with normal kinetics to the  
surface of U(s)11C119 cells, most cells showed no evidence of infection

and failed to accumulate detectable amounts of a mRNAs. The relationship between the expression of U(L)11 and resistance to HSV infection in U(s)11c119 cells has not been defined, but the block to infection with wild-type HSV-1 was overcome by exposing cells with attached virus on their surface to the fusogen polyethylene glycol, suggesting that the block to infection preceded the fusion of viral and cellular membranes. An escape mutant of HSV-1(F), designated R5000, that forms plaques on U(s)11c119 cells was selected. This mutant was found to contain a mutation in the glycoprotein D (gD) coding sequence that results in the substitution of the serine at position 140 in the mature protein to asparagine. A recombinant virus, designated R5001, was constructed in which the wild-type go gene was replaced with the R5000 go gene. The recombinant formed plaques on U(s)11c119 cells with an efficiency comparable to that of the escape mutant R5000, suggesting that the mutation in go determines the ability of the mutant R5000 to grow on U(s)11c119 cells. The observation that the U(s)11c119 cells were slightly more resistant to fusion by polyethylene glycol than parental BHK(tk(-)) cells led to the selection and testing of clonal lines from unselected and polyethylene glycol-selected BHK(tk(-)) cells. The results were that 16% of unselected to as much as 36% of the clones selected for relative resistance to polyethylene glycol fusion exhibited various degrees of resistance to infection. The exact step at which the infection was blocked is not known, but the results illustrate the ease of selection of cell clones with one or more sites at which infection could be blocked.

CC VIROLOGY

STP KeyWords Plus (R): RNA-BINDING PROTEIN; MONOCLONAL-ANTIBODIES; NEUTRALIZATION SITE; SURFACE RECEPTORS; GENE **US11**; TYPE-1; PENETRATION; SEQUENCE; FUSION; CONSTRUCTION

RF 92-4812 001; PUTATIVE ANAEROBIC COPROPORPHYRINOGEN-III OXIDASE IN RHODOBACTER-SPHAEROIDES; TRANSCRIPTIONAL REGULATORY ELEMENT; FUNCTIONAL EXPRESSION

RE

Referenced Author (RAU)	Year (RPY)	VOL (RVL)	PG (RPG)	Referenced Work (RWK)
=====	=====	=====	=====	=====
ARSENAKIS M	1986	60	674	J VIROL
BRANDIMARTI R				IN PRESS P NATL ACAD
CAMPADELLIFIUME G	1988	62	159	J VIROL
CAMPADELLIFIUME G	1990	64	6070	J VIROL
CAMPADELLIFIUME G	1988	166	598	VIROLOGY
COHEN G H	1986	60	157	J VIROL
EJERCITO P M	1968	2	357	J GEN VIROL
FULLER A O	1992	66	5002	J VIROL
FULLER A O	1987	84	5454	P NATL ACAD SCI USA
GIBSON W	1972	10	1044	J VIROL
GIBSON W	1974	13	155	J VIROL
HIGHLANDER S L	1987	61	3356	J VIROL
JOHNSON D C	1988	62	4605	J VIROL
JOHNSON D C	1990	64	2569	J VIROL
JOHNSON P A	1986	67	871	J GEN VIROL
JOHNSON R M	1989	63	819	J VIROL
LANGELAND N	1987	61	3388	J VIROL
LIGAS M W	1988	62	1486	J VIROL
MACLEAN C A	1987	68	1921	J GEN VIROL
MANIATIS T	1982			MOL CLONING
MAVROMARANAZOS P	1986	60	807	J VIROL
MCGEOCH D J	1986	181	1	J MOL BIOL
MUGGERIDGE M I	1988	62	3274	J VIROL
MUGGERIDGE M I	1990	174	375	VIROLOGY
NOBLE A G	1983	129	218	VIROLOGY
PEREIRA L	1982	35	363	INFECT IMMUN
POST L E	1981	25	227	CELL

PUISSANT C	1990	8	148	BIOTECHNIQUES
PUVIONDUTILLEUL F	1987	43	487	EUR J CELL BIOL
RIXON F J	1984	12	2473	NUCLEIC ACIDS RES
ROIZMAN B	1968	2	83	J VIROL
ROLLER R J	1990	64	3463	J VIROL
ROLLER R J	1991	65	5873	J VIROL
ROLLER R J	1992	66	3624	J VIROL
SARMIENTO M	1979	29	1149	J VIROL
SCHWARTZ J	1969	4	879	J VIROL
WATSON R J	1982	10	979	NUCLEIC ACIDS RES

L14 ANSWER 3 OF 5 SCISEARCH COPYRIGHT 2003 ISI (R)

AN 92:322617 SCISEARCH

GA The Genuine Article (R) Number: HU599

TI THE HERPES-SIMPLEX VIRUS-1 RNA-BINDING PROTEIN U(S)11 IS A VIRION COMPONENT AND ASSOCIATES WITH RIBOSOMAL 60S SUBUNITS

AU **ROLLER R J**; ROIZMAN B (Reprint)

CS UNIV CHICAGO, MARJORIE B KOVLER VIRAL ONCOL LABS, CHICAGO, IL, 60637

CYA USA

SO JOURNAL OF VIROLOGY, (JUN 1992) Vol. 66, No. 6, pp. 3624-3632.

ISSN: 0022-538X.

DT Article; Journal

FS LIFE

LA ENGLISH

REC Reference Count: 40

AB The herpes simplex virus 1 U(s)11 gene encodes a site- and conformation-specific RNA binding regulatory protein. We fused the coding sequence of this protein with that of beta-galactosidase, expressed the chimeric gene in Escherichia coli, and purified a fusion protein which binds RNA in the same way as the infected cell protein. The fusion protein was used to generate anti-U(s)11 monoclonal antibody. Studies with this antibody showed that U(s)11 protein is a viral structural protein estimated to be present in 600 to 1,000 copies per virion. The great majority of cytoplasmic U(s)11 protein was found in association with the 60S subunit of infected cell ribosomes. U(s)11 protein associates with ribosomes both late in infection at the time of its synthesis and at the time of infection after its introduction into the cytoplasm by the virion. U(s)11 protein expressed in an uninfected cell line stably transfected with the U(s)11 gene associates with ribosomal 60S subunits and localizes to nucleoli, suggesting that U(s)11 protein requires no other viral functions for these associations.

CC VIROLOGY

STP KeyWords Plus (R): AMINO-ACID-SEQUENCE; ALPHA-GENES; THYMIDINE KINASE; TYPE-1; CELLS; **US11**; IDENTIFICATION; CONSTRUCTION; POLYPEPTIDES; EXPRESSION

RF 91-1546 001; HERPES-SIMPLEX VIRUS GB GENE; VARIABLE-LENGTH DIRECTLY REPEATED TERMINAL SEQUENCE ELEMENTS; DIFFERENTIAL EXPRESSION  
91-4817 001; LIPASE GENE; CDNA FOR STIMULATORY GDP/GTP EXCHANGE PROTEIN; EXPRESSION OF MESSENGER-RNA  
91-7646 001; ESCHERICHIA-COLI K-12; PUTRESCINE REPRESSES EXPRESSION OF THE SPEA GENE ENCODING BIOSYNTHETIC ARGININE DECARBOXYLASE

RE

Referenced Author (RAU)	Year (RPY)	VOL (RVL)	PG (RPG)	Referenced Work (RWK)
=====	=====	=====	=====	=====
ARSENAKIS M	1986	60	674	J VIROL
BATTERSON W	1983	46	371	J VIROL
CAMPBELL M E M	1984	180	1	J MOL BIOL
CHALLBERG M D	1986	83	9094	P NATL ACAD SCI USA
CULLEN B R	1990	178	1	VIROLOGY
EJERCITO P M	1968	2	357	J GEN VIROL
FENWICK M L	1984	19	359	COMPR VIROL

FENWICK M L	1978	41	37	J GEN VIROL
GIBSON W	1972	10	1044	J VIROL
GIBSON W	1974	13	155	J VIROL
HEINE J W	1974	14	640	J VIROL
JOHNSON P A	1986	67	871	J GEN VIROL
KOHLER G	1976	6	511	EUR J IMMUNOL
KWONG A D	1988	62	912	J VIROL
LEMKE H	1978	271	249	NATURE
MACKEM S	1982	43	1015	J VIROL
MACKEM S	1982	44	939	J VIROL
MACLEAN C A	1987	68	1921	J GEN VIROL
MANIATIS T	1982			MOL CLONING
MASSE T	1990	220	377	MOL GEN GENET
MAVROMARANAZOS P	1986	60	807	J VIROL
MCGECH D J	1986	181	1	J MOL BIOL
MILLER J H	1972			EXPT MOL GENETICS
NISHIOKA Y	1977	74	2370	P NATL ACAD SCI USA
PELLETT P				UNPUB
PELLETT P E	1985	82	5870	P NATL ACAD SCI USA
POST L E	1981	24	555	CELL
PURVES F C	1991	65	5757	J VIROL
RIXON F J	1984	12	2473	NUCLEIC ACIDS RES
ROIZMAN B	1968	2	83	J VIROL
ROLLER R J	1990	64	3463	J VIROL
ROLLER R J	1991	65	5873	J VIROL
RUTHER U	1983	2	1791	EMBO J
SCHWARTZ J	1969	4	879	J VIROL
SIMONSEN C C	1983	80	2495	P NATL ACAD SCI USA
SPEAR P G	1972	9	143	J VIROL
SYDISKIS R J	1966	153	76	SCIENCE
SYDISKIS R J	1968	34	562	VIROLOGY
WAGNER E K	1969	4	36	J VIROL
WATSON R J	1982	10	979	NUCLEIC ACIDS RES

L14 ANSWER 4 OF 5 SCISEARCH COPYRIGHT 2003 ISI (R)

AN 91:591150 SCISEARCH

GA The Genuine Article (R) Number: GL296

TI HERPES-SIMPLEX VIRUS-1 RNA-BINDING PROTEIN-US11 NEGATIVELY  
REGULATES THE ACCUMULATION OF A TRUNCATED VIRAL MESSENGER-RNA

AU **ROLLER R J**; ROIZMAN B (Reprint)

CS UNIV CHICAGO, MARJORIE B KOVLER VIRAL ONCOL LABS, CHICAGO, IL, 60637  
CYA USA

SO JOURNAL OF VIROLOGY, (1991) Vol. 65, No. 11, pp. 5873-5879.

DT Article; Journal

FS LIFE

LA ENGLISH

REC Reference Count: 34

AB The U(s)11 gene of herpes simplex virus 1 (HSV-1) encodes a site-specific, basic, RNA-binding protein. The viral RNA sequences bound by U(s)11 protein precipitated by a monoclonal antibody hybridized to a 1.3-kb BamHI C' fragment of the HSV-1 genome. This fragment encodes a U(s)11-regulated transcript which accumulates to high level in the cells infected with U(s)11- virus but not in cells infected with wild-type virus. This transcript, designated DELTA-34, is a truncated form of the mRNA encoding an essential protein encoded by the U(L)34 open reading frame. The U(s)11 protein was shown to bind DELTA-34 RNA at or near its 3' terminus. The nucleotide sequence of the region surrounding the termination of transcription of DELTA-34 RNA transcription suggests that the latter may be the product of transcriptional attenuation. U(s)11 protein resembles the tat protein of human immunodeficiency virus with respect to size, charge, nucleolar accumulation, and possibly effect on accumulation of its target RNA but does not share with it discernible

sequence homology.

CC VIROLOGY

STP KeyWords Plus (R): LONG TERMINAL REPEAT; C-MYC GENE; ALPHA-47 GENE;  
TRANSCRIPTION; EXPRESSION; ELONGATION; TYPE-1; CELLS; SEQUENCE; HIV-1

RF 91-1546 002; HERPES-SIMPLEX VIRUS GB GENE; VARIABLE-LENGTH DIRECTLY  
REPEATED TERMINAL SEQUENCE ELEMENTS; DIFFERENTIAL EXPRESSION  
91-4817 001; LIPASE GENE; CDNA FOR STIMULATORY GDP/GTP EXCHANGE PROTEIN;  
EXPRESSION OF MESSENGER-RNA

RE

Referenced Author (RAU)	Year (RPY)	VOL (RVL)	PG (RPG)	Referenced Work (RWK)
BENDER T P	1987	237	1473	SCIENCE
BENTLEY D L	1988	53	245	CELL
BENTLEY D L	1986	321	702	NATURE
CULLEN B R	1990	178	1	VIROLOGY
EICK D	1986	14	8331	NUCLEIC ACIDS RES
EJERCITO P M	1968	2	357	J GEN VIROL
FORT P	1987	15	5657	NUCLEIC ACIDS RES
JENKINS F J	1984	52	99	J VIROL
JOHNSON P A	1986	67	871	J GEN VIROL
KAO S Y	1987	330	489	NATURE
KRISTIE T M	1986	83	3218	P NATL ACAD SCI USA
LASPIA M F	1989	59	283	CELL
LEE K A W	1988	5	22	GENE ANAL TECH
LIU F	1991	65	206	J VIROL
LONGNECKER R	1986	58	583	J VIROL
MACLEAN C A	1987	68	1921	J GEN VIROL
MANIATIS T	1982			MOL CLONING
MAVROMARANAZOS P	1986	60	807	J VIROL
MCGECH D J	1988	69	1531	J GEN VIROL
MECHTI N	1986	14	9653	NUCLEIC ACIDS RES
MEIGNIER B	1988	162	251	VIROLOGY
MOUNT S M	1982	10	459	NUCLEIC ACIDS RES
PEPPEL K	1990	9	711	BIOTECHNIQUES
POST L E	1981	24	555	CELL
POST L E	1981	25	227	CELL
PURVES F C	1991	65	5757	J VIROL
RESNEKOV O	1988	72	91	GENE
RESNEKOV O	1989	86	12	P NATL ACAD SCI USA
ROIZMAN B	1990		1795	FIELDS VIROLOGY
ROIZMAN B	1968	2	83	J VIROL
ROLLER R J	1990	64	3463	J VIROL
ROLLER R J				UNPUB
SEIBERG M	1987	1	97	VIRUS GENES
SELBY M J	1989	3	547	GENE DEV

L14 ANSWER 5 OF 5 SCISEARCH COPYRIGHT 2003 ISI (R)

AN 90:338959 SCISEARCH

GA The Genuine Article (R) Number: DJ203

TI THE HERPES-SIMPLEX VIRUS **us11** OPEN READING FRAME ENCODES A  
SEQUENCE-SPECIFIC RNA-BINDING PROTEIN

AU **ROLLER R J**; ROIZMAN B (Reprint)

CS UNIV CHICAGO, MARJORIE B KOVLER VIRAL ONCOL LABS, CHICAGO, IL, 60637  
CYA USA

SO JOURNAL OF VIROLOGY, (1990) Vol. 64, No. 7, pp. 3463-3470.

DT Article; Journal

FS LIFE

LA ENGLISH

REC Reference Count: 43

CC VIROLOGY

RF 90-1572 001; HERPES-SIMPLEX VIRUS TYPE-1 DNA-POLYMERASE GENE; ESSENTIAL

CAPSID PROTEIN ICP32/VP19C; UL37 OPEN READING FRAME  
 90-2362 001; STA58 MAJOR ANTIGEN GENE; RHODOCOCCLUS-FASCIANS CLONING  
 VECTORS; ESCHERICHIA-COLI CHROMOSOME; PRECISE IDENTIFICATION

RE

Referenced Author (RAU)	Year (RPY)	VOL (RVL)	PG (RPG)	Referenced Work (RWK)
ACKERMANN M	1986	58	843	J VIROL
ANDERSON K P	1981	37	1011	J VIROL
CHOU J	1986	57	629	J VIROL
CHOU J	1989	63	1059	J VIROL
CHOU J	1990	64	1014	J VIROL
DALZIEL R G	1984	65	1467	J GEN VIROL
EJERCITO P M	1968	2	357	J GEN VIROL
FENWICK M L	1984	19	359	COMPR VIROL
HOLLAND L E	1984	49	947	J VIROL
HONESS R W	1974	14	8	J VIROL
HONESS R W	1975	72	1276	P NATL ACAD SCI USA
HUBENTHALVOSS J	1988	62	454	J VIROL
JOHNSON P A	1986	67	871	J GEN VIROL
KRISTIE T M	1986	83	3218	P NATL ACAD SCI USA
KWONG A D	1988	62	912	J VIROL
LEE K A W	1988	5	22	GENE ANAL TECHN
LEIBOLD E A	1988	85	2171	P NATL ACAD SCI USA
LONGNECKER R	1986	58	583	J VIROL
LONGNECKER R	1987	236	573	SCIENCE
LONSDALE D M	1979	43	151	J GEN VIROL
MACLEAN C A	1987	68	1921	J GEN VIROL
MANIATIS T	1982			MOL CLONING
MAVROMARANAZOS P	1986	60	807	J VIROL
MCGEOCH D J	1988	69	1531	J GEN VIROL
MCGEOCH D J	1986	181	1	J MOL BIOL
MCLAUCHLAN J	1989	59	1093	CELL
MEIGNIER B	1988	162	251	VIROLOGY
NIELSEN D A	1986	14	5936	NUCLEIC ACIDS RES
POST L E	1981	25	227	CELL
PUVIONDUTILLEUL F	1985	39	458	EUR J CELL BIOL
READ G S	1983	46	498	J VIROL
RIXON F J	1983	64	2087	J GEN VIROL
RIXON F J	1984	12	2473	NUCLEIC ACIDS RES
ROIZMAN B	1990		1795	FIELDS VIROLOGY
ROIZMAN B	1968	2	83	J VIROL
ROLLER R J	1989	86	6518	P NATL ACAD SCI USA
ROSS J	1987	262	9374	J BIOL CHEM
ROSS J	1986	188	579	J MOL BIOL
SILLERO A	1989	179	319	ANAL BIOCHEM
VLAZNY D A	1982	79	1423	P NATL ACAD SCI USA
WADSWORTH S	1975	15	1487	J VIROL
WAGNER E K	1969	4	36	J VIROL
WATSON R J	1982	10	979	NUCLEIC ACIDS RES

## WEST Search History

DATE: Friday, April 18, 2003

<u>Set Name</u>	<u>Query</u>	<u>Hit Count</u>	<u>Set Name</u>
side by side			result set
<i>DB=USPT; PLUR=YES; OP=ADJ</i>			
L14	Kinesin activity and blocking.clm.	0	L14
L13	blocking Kinesin .clm.	0	L13
L12	Kinesin and antibody.clm.	48	L12
L11	Kinesin and antibody and blocking.clm.	0	L11
L10	Kun Ernest.in. and L2	1	L10
L9	Kun Ernest.in.	20	L9
L8	Kinesin and inhibiting.clm.	11	L8
L7	Kinesin and inhibiting	119	L7
L6	Kinesin and antibody and inhibiting	116	L6
L5	Kinesin and antibody and blocking	65	L5
L4	Kinesin and antibody	173	L4
L3	Kinesin.clm.	13	L3
L2	Kinesin	187	L2
L1	Diefenbach Russell.in.	0	L1

END OF SEARCH HISTORY

# WEST Search History

DATE: Friday, April 18, 2003

<u>Set Name</u>	<u>Query</u>	<u>Hit Count</u>	<u>Set Name</u>
side by side			result set
<i>DB=USPT; PLUR=YES; OP=ADJ</i>			
L14	Kinesin activity and blocking.clm.	0	L14
L13	blocking Kinesin .clm.	0	L13
L12	Kinesin and antibody.clm.	48	L12
L11	Kinesin and antibody and blocking.clm.	0	L11
L10	Kun Ernest.in. and L2	1	L10
L9	Kun Ernest.in.	20	L9
L8	Kinesin and inhibiting.clm.	11	L8
L7	Kinesin and inhibiting	119	L7
L6	Kinesin and antibody and inhibiting	116	L6
L5	Kinesin and antibody and blocking	65	L5
L4	Kinesin and antibody	173	L4
L3	Kinesin.clm.	13	L3
L2	Kinesin	187	L2
L1	Diefenbach Russell.in.	0	L1

END OF SEARCH HISTORY



**THOMSON**  
MICROMEDEX

PDR® Electronic Library™

Thomson St

PDR SUITE | INTERACTIONS | STEDMAN'S DICTIONARY

DICTIONARY SEARCH | BROWSE

[Dictionary Search](#) > **Definition**

↪ **STEDMAN'S** *The Best Words in Medicine.™*

**Stedman's Dictionary**

Define:

## Stedman's Medical Dictionary 27th Edition

### anterograde (an'ter-o-grad)

1. Moving forward. Cf.: antegrade. 2. Extending forward from a particular point in time; used in reference to amnesia. [L. *gradior*, 1 pp. *gressus*, 1 to step, go]

*Copyright© 2000 Lippincott Williams & Wilkins. All rights reserved*

[Home](#) || [Warranty and Disclaimer](#) || [About Us](#) || [Help](#) || [Log Out](#)  
[Contact Us](#) or call the 24-Hour [Tech Support](#) line at 1-800-525-9083, option '3'  
[Copyright© 2002-2003 Thomson MICROMEDEX. All rights reserved.](#)

**THOMSON**  
MICROMEDEX

PDR® Electronic Library™

Thomson Su

PDR SUITE | INTERACTIONS | STEDMAN'S DICTIONARY

► DICTIONARY SEARCH | BROWSE |

[Dictionary Search](#) > **Definition**↪ **STEDMAN'S** *The Best Words In Medicine.™*

Stedman's Dictionary

Define:

## Stedman's Medical Dictionary 27th Editor

### axon (ak'son)

The single process of a nerve cell that under normal conditions conducts nervous impulses away from the cell body and its remaining processes (dendrites). It is a relatively even filamentous process varying in thickness from about 0.25 to more than 10  $\mu$  ( $\mu$ m). In contrast to dendrites, which rarely exceed 1.5 mm in length, Axons1 can extend great distances from the parent cell body (some  $\alpha$ . of the pyramidal tract are 40–50 cm long). Axons1 0.5  $\mu$  ( $\mu$ m) thick or over are generally enveloped by a segmented myelin sheath provided by oligodendroglia cells (in brain and spinal cord) or Schwann cells (in peripheral nerves). Like dendrites and nerve cell bodies, Axons1 contain a large number of neurofibrils. With some exceptions, nerve cells synaptically transmit impulses to other nerve cells or to effector cells (muscle cells, gland cells) exclusively by way of the synaptic terminals of their  $\alpha$ . [G. axon, 1 axis]

*Copyright© 2000 Lippincott Williams & Wilkins. All rights reserved*

[Home](#) || [Warranty and Disclaimer](#) || [About Us](#) || [Help](#) || [Log Out](#)  
[Contact Us](#) or call the 24-Hour [Tech Support](#) line at 1-800-525-9083, option '3'  
Copyright© 2002-2003 Thomson MICROMEDEX. All rights reserved.